

branched from the base. The leaflets are broadest above the middle, blunt or notched at the end, and tipped with an abrupt point; they number usually from 10 to 14. The rather large purple flowers are borne 1 or 2 together at the base of the leaf. The plant is soft-hairy all over. This native of Europe and Western Asia has been cultivated for upward of twenty centuries, and is considered one of the best soiling crops in cool, moist climates. In the United States it has only proved adaptable to cultivation in the New England States and Canada. Vetches are sown in April or May, at the rate of 2 bushels of seed per acre, and the crop is ready to cut by the middle of June or the first of July. Where they can be grown, they are a very good summer feed for horses, but must not be fed earlier than full bloom, on account of their diuretic action. They are good for soiling sheep and milch cows, and are said to very materially increase the flow of milk. Because of the high price asked for seed, and the extreme susceptibility of vetches to dry hot weather, their cultivation is not recommended. A greater and surer return can always be had from red clover." (*Jared G. Smith.*)

"Annual. Excellent and abundant green forage, to be employed either alone or mixed with various other plants. To be sown with a little barley or oats for support when the seed is well harrowed in, from March to July. The vetch prefers land of quite good quality, a little heavy and moist, though wholesome, to lands too light or too compact and humid." (*Vilmorin.*)

The seed weighs 62 pounds per bushel; 186 pounds is sown per acre.

1505. VICIA SATIVA.

Vetch.

From France. Received through Mr. W. T. Swingle, December, 1898. "Vesce de printemps de Bretagne" (Brittany spring vetch).

1506. VICIA SATIVA.

Vetch.

From France. Received through Mr. W. T. Swingle, December, 1898. (9 packages.)

Variety: "*hyemalis*" (winter).

"A variety of the preceding; requires wholesome land; may be sown from September to the middle of November, either alone or mixed with barley, rye, or winter oats; it forms the basis for mixtures of green forage; to be sown in autumn for spring cutting." (*Vilmorin.*)

The seed weighs 62 pounds per bushel, and 186 pounds is sown per acre.

1507. VICIA SATIVA.

Vetch.

From France. Received through Mr. W. T. Swingle, December, 1898. (4 packages.)

"Vesce blanche" (white vetch).

"Annual; not so high as the common vetch; earlier, hardy, cultivated more especially for its seed, which is of a white or whitish color, and is used in some localities for human food. This variety appears to have merit as a forage plant. Flower violet."

The seed weighs about 62 pounds per bushel; 186 pounds is sown per acre.

1508. VICIA MACROCARPA.

Vetch.

From France. Received through Mr. W. T. Swingle, December, 1898. (2 packages.)

"Vesce à gros fruit" (large-fruited vetch).

"Annual; distinguished from the common winter vetch by its larger foliage, closer and more numerous leaflets, and especially by its pods, which, when green, are very large, cylindrical, swollen, thick, fleshy, attaining the size of a small finger, and resembling those of a small potage pea. The seed is also very large.

This variety, originally from Algeria, is much preferred by the Arabs, especially at the time when the pods, still green and succulent, have attained their full development. To obtain good results with it, the sowing in the South and in warmer climates should be done in the autumn rather than in the spring; even in the North it will be well to sow in the autumn or at the close of winter, very early, in January or February at latest, without which the result may leave much to be desired. In conclusion, this excellent variety appears to have more interest for the southwestern or southern parts of France than for the climate of Paris." (*Vilmorin.*)

The seed weighs 62 pounds per bushel; 160 to 200 pounds is sown per acre.